RAILROAD ACCIDENT INVESTIGATION

Report No 3831

LOUISIANA AND ARKANSAS RAILWAY COMPANY

ALEXANDRIA, LA

DECEMBER 12, 1958

INTERSTATE COMMERCE COMMISSION

Washington

SUMMARY

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December 12, 1958 DATE Louisiana and Arkansas RAILROAD Alexandria, La LOCATION KIND OF ACCIDENT Rear-end collision **Passenger** TRAINS INVOLVED Freight 42 10 TRAIN NUMBERS Diesel-electric units 33A, 33B, LOCOMOTIVE NUMBERS Diesel-electric unit 25 57C, and 71C 5 cars CONSISTS 150 cars, caboose SPEED Standing Undetermined Timetable, train orders OPERATION TRACK Single, tangent, 0 48 percent ascending grade northward Clear WEATHER TIME 133 p m CASUALTIES 17 injured

Failure to provide adequate protection for train occupying main

track on time of following superior train

CAUSE

INTERSTATE COMMERCE COMMISSION

REPORT NO 3831

IN THE MATTER OF MAKING ACCIDENT INVESTIGATION REPORTS UNDER THE ACCIDENT REPORTS ACT OF MAY 6, 1910

LOUISIANA AND ARKANSAS RAILWAY COMPANY

April 27, 1959

Accident at Alexandria, La, on December 12, 1958, caused by failure to provide adequate protection for a train occupying the main track on the time of a following superior train

REPORT OF THE COMMISSION !

FREAS, Commissioner

On December 12, 1958, near Alexandria, La , there was a rear-end collision on the Louisiana and Arkansas Railway which resulted in the injury of 2 train-service employees, I dining-caremployee, and 14 passengers

lUnder authority of section 17 (2) of the Interstate Commerce Act the above-entitled proceeding was referred by the Commission to Commissioner Freas for consideration and disposition

Location of Accident and Method of Operation

This accident occurred on that part of the Louisiana and Arkansas Division extending between Mansura Jct and Alexandria, La , 31 6 miles, a single-track line over which trains are operated by timetable and train orders. There is no block system in use. The accident occurred on the main track at a point 3.4 miles south of the station at Alexandria and 1,801 feet south of the Alexandria yard limits. From the south there are, in succession, a tangent 4.4 miles in length, a 1°30′ curve to the left 1,088 feet, a tangent 398 feet to the point of accident and a considerable distance northward. From the south the average grade is 0.33 percent ascending 3,000 feet, 0.34 percent descending 1,300 feet, 0.48 percent ascending about 60 feet to the point of accident and 840 feet northward.

The carrier's operating rules read in part as follows

11 Fusee Signals — A train or engine finding a fusee burning on or near its track must stop * * * after stopping, train or engine will then proceed at restricted speed for a safe flagging distance

11(α) - Torpedo Signals - * * *

The explosion of two torpedoes is a signal to immediately reduce speed and proceed for a safe flagging distance at restricted speed

* * *

35 Flagging Signals - The following signals will be used by flagmen

Day Signals

A red flag, Torpedoes and Red fusees

* * *

- 72 Trains of the first class are superior to those of the second * * *
- 86 Clearing Trains Same Direction Unless otherwise provided, an inferior train must clear a first-class train * * * in the same direction, at the time such train is due to leave next station in the rear where time is shown in timetable * * *
- 87 Protection When Failure to Clear When an inferior train fails to clear a superior train by the time required by rule, it must be protected at that time as prescribed by Rule 99

* * *

99 * * *

When a train stops on a main track under circumstances in which it may be overtaken by another train, the flagman must go back immediately with flagman's signals a sufficient distance to insure full protection, placing two torpedoes and, when necessary, in addition, displaying lighted red fusees * * *

* * *

99(1) When flagged, the engineer must answer stop signals promptly Flagman must continue to give stop signals until such signals are answered and acted upon * * *

The maximum authorized speed for passenger trains in the vicinity of the point of accident is 58 miles per hour

Description of Accident

No 42, a northbound second-class freight train, consisting of diesel-electric units 33Å, 33B, 57C, and 71C, coupled in multiple-unit control, 199 cars and a caboose, departed from No Baton Rouge, La , 106 2 miles south of Alexandria, at 8 30 a m , 2 hours 48 minutes late. It passed Hessmer, the last open office, 26 7 miles south of Alexandria, at 12 31 p m , 3 hours 26 minutes late, passed Mansura Jct , and about 1 10 p m it stopped on the main track at Alexandria with the rear end 3 4 miles south of the station and south of the Alexandria yard limits. About 23 minutes later, after the train had been reduced to 150 cars, the rear end was struck by No 10

No 10, a northbound first-class passenger train, consisted of diesel-electric unit 25, 1 express-refrigerator car, 1 baggage car, 2 coaches, and a dining car, in that order. The 2nd car was of steel underframe construction, and the other cars were of all-steel construction. This train departed from No Baton Rouge at 11 39 a.m., 14 minutes late, passed Hessmer at 1 11 p.m., 6 minutes late, passed Mansura Jct., passed Latanier, 9.2 miles south of Alexandria, the next station south of the point of accident, at 1.26 p.m., 2 minutes late, and while moving at an undetermined speed it struck the rear end of No. 42

The caboose and the 150th car of No 42 were derailed and stopped on the track structure about in line with the track. The superstructure of the caboose was telescoped by the locomotive. The caboose was destroyed and the 150th car was heavily damaged. The locomotive of No 10 stopped with its front end on the rear end of the 150th car of the preceding train at a point about 100 feet north of the point of collision. A separation occurred between the locomotive and the first car. The locomotive and the first car were derailed and stopped in line with the track structure. The locomotive and the 3rd and 4th cars were heavily damaged. The 1st car was slightly damaged and the 2nd and 5th cars were considerably damaged.

The engineer and the fireman of No 10 were injured

The weather was clear at the time of the accident, which occurred about 1 33 p m

The locomotives and the caboose involved were provided with two-way radio-telephone equipment. On the day of the accident the radio-telephone equipment on the locomotive of No. 10 was inoperative.

The speed-recording device on the locomotive of No 10 was not equipped with a tape

Discussion

On the day of the accident No 42 was stopped at Rosewood, 41 7 miles south of Alexandria, to permit the front brakeman and the flagman to locate the cause of an undesired application of the brakes. A defective brake condition was found on the 11th car and the brakes of this car were cut out. The flagman was instructed to board the locomotive to minimize the delay and the train then proceeded to Alexandria. About 1 10 pm, in accordance with radio-telephone instructions received from the Alexandria yardmaster, the train was stopped on the main track at Alexandria with the front end and the rear end, respectively, 2 miles and 3.4 miles south of the station. After the first 49 cars were separated from the train and moved northward a short distance, the locomotive was detached and the cars were removed from the main track by a yard crew. The locomotive was moved to the vicinity of the yard office, a crew-change point, 2,165 feet south of the station. The inbound enginemen went off duty at 1.25 pm, and at that time the inbound flagman and front brakeman were in the yard office waiting to go off duty upon the arrival of the conductor. The enginemen, the front brake-

man, and the flagman of the outbound crew boarded the locomotive at the yard office and proceeded to the detached portion of the train standing on the main track. The locomotive was coupled to the train about $1.29 \, \mathrm{p}$ m

As No 42 was approaching the point where the accident occurred, the conductor was alone in the caboose. He was aware of the instructions received from the yardinaster at Alexandria and knew where the train was to be stopped on arrival at that point. No 42 arrived at Alexandria at 1 10 p m, according to the dispatcher's record of train movements. The conductor said that he alighted from the moving train with flagging equipment in the vicinity of mile post 686. This mile post is located about 3,470 feet south of the point of accident and it is near the north end of a tangent more than 4 miles in length. The conductor said that he immediately lighted a 10-minute fusee and when the caboose moved out of view on the curve he placed two torpedoes on the east rail in the vicinity of the mile post. He said that he placed a lighted fusee at this point and proceeded northward a distance which he estimated as 1,700 to 2,100 feet from where he observed that the fusee left in the vicinity of the mile post had burned out. He said that he then left another lighted fusee on the track before proceeding northward an additional distance which he estimated as about 700 feet where he remained until No 10 approached He said that when he last looked at his watch at the point where he left the second lighted fusee it was 1.26 p m. No. 10 was due to leave Latanier, 9.2 miles south of Alexandria, at 1.24 p. m. The conductor said that when he observed No. 10 approaching he lighted another fusee and gave stop signals with the fusee and a red flag, but the signals were not acknowledged. He said that from his position on the east side of the track he observed the engineer in the control compartment of the locomotive but did not see any indications of braking action on the train. He said that he continued to give stop signals until the locomotive passed him at an estimated speed of 40 miles per hour. He said that after the collision occurred he immediately proceeded northward. When he was in the immediate vicinity of the rear end of the train he saw the conductor of No 10, and when he was in the vicinity of the locomotive he observed the flagman of No 10 proceeding southward to provide protection

As No 10 was approaching the point where the accident occurred the enginemen were in the control compartment at the front of the locomotive. The members of the train crew were in various locations in the cars of the train. The headlight was lighted. The brakes of this train had been tested and had functioned properly when used en route.

The engineer of No 10 said that the speed of the train was about 58 miles per hour when he observed the rear end of No 42 and that he immediately applied the brakes in emergency. He said that immediately after observing the preceding train he saw the conductor standing approximately 20 feet from the rear of the caboose He said that he saw the conductor light a fusee and run southward giving stop signals. The fireman said that he saw the rear end of the preceding train before he observed the conductor giving stop signals and called a warning about the same time that the engineer made an emergency application of the brakes. He estimated that the conductor was approximately 200 to 250 feet from the rear of the caboose when he first saw him. The engineer and the fireman said that they did not see any lighted fusees prior to observing the conductor of No 42 giving stop signals nor did they hear the explosion of any torpedoes. The enginemen jumped from the locomotive immediately before the collision, and they were unable to estimate the speed of No. 10 at the time The conductor and the flagman said that the brakes of the train were applied in emergency before the collision. The conductor said that shortly after the accident occurred he observed the conductor of No 42 carrying a lighted fusee at a point approximately 100 feet from the rear of No 10 The flagman of No 10 said that he alighted from the train immediately after the accident occurred and as he proceeded southward to provide flag protection he observed a lighted fusee on the track near the rear end of the train but he did not see the conductor of No 42

A dining-car employee said that when the brakes of No 10 became applied in emergency he immediately proceeded to a vestibule door on the west side of the dining car. He said that he looked ahead from the open upper-half of the door, and saw an unidentified person standing on the east side of the track about 250 feet south of the rear end of No 42. The baggageman, who was seated in the baggage car as the train was approaching the point where the accident occurred, said that he heard the explosion of two torpedoes as the train was moving on the curve immediately south of the point of accident. The enginemen of No 10 said, however, that the brakes had been applied in emergency before the train entered this curve.

In tests made under conditions of visibility similar to those which prevailed at the time of the accident it was disclosed that because of track curvature and vegetation adjacent to the track, a caboose standing at the point of accident first becomes visible from the control compartment of a northbound locomotive at a distance of about 2,265 feet

The conductor of No 42 understood that full protection against following trains, as prescribed by Rule 99, was required when his train was stopped on the main track with the rear end at a point south of the yard limits at Alexandria He also understood that after 1 24 p m , his train was on the time of No 10, a superior train in the same direction. He said he considered full protection had been provided after he had placed two torpedoes and a lighted fusee near mile post 686, placed a lighted fusee at the point which he estimated was 1/4 mile from the rear of his train, and after he had displayed stop signals with a lighted fusee and a red flag as No 10 approached However, the enginemen of No 10 said they did not observe any lighted fusees before observing the conductor of No 42 giving stop signals nor hear any torpedoes explode at anytime. The enginemen also said that when they observed the stop signals the brakes of the train had already been applied in emergency, but there was insufficient distance to stop short of a collision A few minutes after the collision occurred the conductor of No 10 saw the conductor of No 42 carrying a lighted fusee at a point about 100 feet south of No 10 Shortly after the accident occurred the flagman of No 10 alighted from the train, and as he proceeded southward to provide flag protection he observed a lighted fusee on the track near the rear car of the train but did not see the conductor of No 42, who at that time had reached a point in the vicinity of the locomotive of No 10. Under these circumstances, it is apparent that the conductor of No 42 was mistaken as to the locations where he provided flagging protection, and that he did not go back a sufficient distance to insure adequate protection, as required by rules of the carrier

Cause

This accident was caused by failure to provide adequate protection for a train occupying the main track on the time of a following superior train

Dated at Washington, D. C., this twenty-seventh day of April, 1959

By the Commission, Commissioner Freds

HAROLD D McCOY,

(SEAL)